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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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09/467,611

12/20/1999

GEORGE J. MIAO

INTL-0324-US

2610

7590

12/13/2005

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EXAMINER

NGUYEN, DUNG X

ART UNIT

PAPER NUMBER

2638

DATE MAILED: 12/13/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/467,611

Applicant(s)

MIAO ET AL.

Examiner

Dung X Nguyen

Art Unit

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 29 April 2005.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1 - 18 and 20 - 30 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 16 - 18 and 20 - 30 is/are allowed.
- 6) ☒ Claim(s) 1 is/are rejected.
- 7) ☒ Claim(s) 2 - 15 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 20 December 1999 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____

Response to Arguments

1. Applicant's arguments filed on September 06, 2005 have been fully considered and are not persuasive. However, upon further consideration, a new ground(s) of rejection is made in view of new reference(s).

The situation is: Adapted to implement a Global System for Mobile communication mode as recited in claim 1, lines 3 and 4 is not given weight when it simply expresses the intended result of a process step positively recite. *See MPEP 2111.04 (R-3)*.

Claim Objections

2. **Claim 1 is objected** to because of the following informalities: N as recited in line 2 and 3 must be defined such as wherein N is integer, greater than or equal two. Appropriate correction is required.

Rejections - 35 USC § 103

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4. **Claim 1 is rejected** under 35 U.S.C. 103(a) as being unpatentable over Farhan (US patent # 6,433,906 B1).

Regarding claim 1, Farhan discloses (figure 3):

- First digital decimation filter (310) with N bands (column 4, lines 25 – 29).;

- Second digital decimation filter (318, digital filter can be made a decimation filter) rejects some frequency bands coupled to the first digital decimation filter (310) (column 4, lines 3 – 36).

Farhan differs from the instant claimed invention that it does not state that a second decimation filter to reject N-1 bands coupled to the first digital decimation filter.

However, Farhan discloses (figure 3) that adaptive digital filter (318, digital filter can be made a decimation filter) coupled to the first digital decimation filter (310) to perform out-of-band reject of some bands (column 4, lines 3 – 36), Farhan suggestion does not place a limit on the in-band filters. Hence it would have been obvious to one of ordinary skill in the art to implement Farhan's teaching to provide the requirements of the instant claimed invention as a matter of designed choice to limit the number of filters to N-1 since it would depend on the number of filter bands.

Allowable Subject Matter

5. **Claims 2 – 15 are objected** to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

6. **Claims 16 – 18 and 20 - 30 are allowed.** The following is a statement of reasons for the indication of allowable subject matter:

Regarding to the claimed invention, the prior art of record fails to show or render obvious of a method and its corresponding apparatus, comprising:

Providing a first filtering stage and a second filtering stage;

Selectively programming the first stage to filter a W-CDMA signal or a GSM communication signal;

Using the second stage to filter the GSM communication signal;

Detecting the type of signal that has been received;

Adapting the first and second stages to the type of detected signal; and

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Selectively using the first and second stages based on the type of the detected signal.

Contact Information

7 Any inquiry concerning this communication or earlier communications from the examiner should be directed to Dung X. Nguyen whose telephone number is (571) 272-3010. The examiner can normally be reached on Monday through Friday from 8:00 AM to 17:00 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Mr. Vanderpuye Kenneth N. can be reached on (571) 272-3078. The fax phone numbers for this group is (571) 273-3021.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (571) 272-2600.

DXN

November 23, 2005


KENNETH VANDERPUYE
SUPERVISORY PATENT EXAMINER